

20. (Twice Amended) A heat exchanger for cooling exhaust gas of an internal-combustion engine, comprising:

a plurality of tubes for guiding exhaust gas;

a plurality of lugs arranged in pairs in said tubes diagonally to a flow direction of the exhaust gas;

first and second preformed latticed tube bottoms, each tube bottom defining a plurality of openings corresponding to an outer periphery of respective of said tubes, first and second axial ends of each of said tubes being arranged in respective of said openings in said first and second tube bottoms such that said tube bottoms support said tubes substantially parallel to one another and spaced-apart from one another in a bundle, said ends of the tubes and said tube bottoms forming a weld joint therebetween;

a sheet metal jacket concentrically surrounding said bundle and attached to said tube bottoms, said sheet metal jacket and said tube bottoms defining a chamber, said sheet metal jacket being provided with a coolant inlet and a coolant outlet to allow a liquid coolant to enter said chamber, flow around an exterior surface of said tubes in said chamber, and exit said chamber; and

connections attached to ends of said sheet metal jacket and configured for attachment to an exhaust pipe communicated with the exhaust gas from the internal-combustion engine, each of said connections defining an opening which communicates an interior of said tubes with an interior of said exhaust pipe.

Please cancel claim 21 without prejudice or disclaimer.

22. (Twice Amended) A method of manufacturing a heat exchanger for cooling exhaust gas of an internal-combustion engine, said method comprising the steps of:

providing a plurality of rectangular tubes for guiding exhaust gas;

[attaching] arranging a plurality of lugs [to] in said rectangular tubes diagonally to a flow direction of the exhaust gas, said lugs being arranged in pairs;

providing first and second preformed latticed tube bottoms;

welding ends of said rectangular tubes to said latticed tube bottoms such that said rectangular tubes form a bundle;

attaching a sheet metal jacket to said tube bottoms and around said bundle;

providing said sheet metal jacket with a coolant inlet and a coolant outlet to allow a liquid coolant to flow around said rectangular tubes in said sheet metal jacket; and

attaching connections to ends of said sheet metal jacket, said connections being configured for attachment to an exhaust pipe communicated with the exhaust gas from the internal-combustion engine, each said connection defining a central opening which communicates said rectangular tubes with the exhaust pipe.